proceedings (and after it filed its instant application) that Ameritech agreed that it would move away from its proprietary ASR interface by the end of the year.

Pre-Ordering

61. The pre-order function involves the exchange of information between carriers prior to, and in anticipation of, the placing of an actual order. Ameritech lists five key sub-functions that it offers to telecommunication carriers: (1) access to customer service records (CSR); (2) the ability to select and reserve telephone numbers while the end-user is on-line; (3) determination of features available to the end-user; (4) the ability to select an order due date and to schedule any necessary outside work while the end-user is on-line; and (5) address validation. (Rogers Aff. ¶ 21). Ameritech has also agreed with MCI to provide a sixth function -- available primary interexchange carrier (PIC) inquiry, and it provides a seventh function, directory listing, information as part of CSRs. This list is incomplete. In order for local competition to be fully viable, Ameritech must provide three additional pre-order sub-functions. The additional three are: (1) block of direct inward dial (DID) numbers inquiry; (2) DID trunk inquiry; and (3) unbundled network element service provider inquiry.

62. These missing functionalities are presently being addressed at the OBF and are important. The last one, for example, is essential in an environment in which multiple service providers might be providing different pieces of a single customer's service -- where, say, carrier A furnishes the loop, carrier B furnishes the switching capability, and carrier C furnishes directory assistance services. By overlooking this functionality, Ameritech's pre-order OSS fails to present all information that a CLEC requires at the pre-ordering stage in order to convert an existing

customer services through an unbundling situation involving another CLEC. If a CLEC attempts to convert a customer without knowing which carriers supply which elements, the customer will lose service. Only Ameritech has the needed visibility into the existing unbundled network architecture for a customer that converts between CLECs. This is discriminatory.

63. For those pre-order functions it does offer, the means that Ameritech offers for accessing the function vary by function. For those three pre-order functions that involve "relatively static information" -- feature availability, PIC availability and street address guides, Ameritech uses file transfer as its means of providing CLECs this information. Rogers Aff. ¶ 24. This is fully appropriate.

64. For those other pre-order functions it offers, Ameritech states that it will use EDI. What is not clear from Ameritech's filing is whether it will use the Electronic Communications Implementation Committee's (ECIC) interim pre-ordering solution of EDI via TCP/IP, a solution ECIC adopted on March 7 and for which it is presently working on specifications. MCI has been under the impression that Ameritech is committed to EDI via EAP, or perhaps EDI via TCP/IP with some sort of EAP log-in system, a proposed solution which received only seven votes at ECIC as compared with the 25 votes received by EDI via TCP/IP.

65. If Ameritech is now offering an interface consistent with the solution adopted by ECIC it should make this clear. If it is not doing so, its interface is inadequate. First, if Ameritech's interface uses EAP it is proprietary. It would therefore create significant industry variations, creating challenges for training CLEC representatives to service customers across multiple service areas. Second, EDI via EAP was rejected by the industry for a reason. TCP/IP is the data protocol used by the internet; many programmers who can be hired by carriers are

familiar with it and it is supported by multiple vendors; in contrast, EAP is proprietary to General Electric Information Systems (GEIS), which is partly owned by Ameritech, and which is the only vendor that supports the product. As GEIS explained its product to MCI, a CLEC must purchase a fairly complicated package of software, as well as consulting services, from GEIS in order to use the product. EDI via TCP/IP is therefore a superior, and the industry approved, solution.

66. Ameritech's EDI pre-ordering interface is also not operationally ready. Of the three pre-order functions for which Ameritech employs EDI, two of them, telephone number selection and due date negotiation, have not been used commercially. Meixner Aff., Schedule 3. Even the third function, retrieval of CARS, is not being used commercially while the customer is on the line, Rogers Aff. ¶ 25. Telephone number selection and due date selection do not even seem to have been tested while a customer is on the line.

67. In addition, even for the limited commercial use and testing that has occurred, Ameritech fails to present results needed to support its case for operational readiness. Ameritech's data from USN's use of the interface only shows how many transactions have been processed, not how many errors have resulted. Ameritech's test with MFS appears to have resulted in 44 errors of 305 transactions, a rather significant percentage. Rogers Aff. ¶ 305. Ameritech also admits to at least 140 errors that resulted from its own pre-ordering systems in the week of April 1-9; it does not say how many transactions were processed properly. Rogers Aff. ¶ 30.

68. Ameritech's pre-ordering interface also is not likely to process transactions rapidly enough at high volumes. Although there has been some confusing testimony on this issue in state

proceedings, there has been some indication that Ameritech's backend systems can only handle eight simultaneous transactions and that requests beyond those eight are placed in a queue. Testimony of AT&T Witness Timothy Connolly, Ill. Phase II Tr. 2084 (ex. 11). There has also been some indication that a maximum of six CLECs can use the system. Testimony of Ameritech Witness Joseph Rogers, MI § 271 Proceedings, p. 222 (ex. 13). If these systemic limitations in fact exist, which Ameritech needs to clear up, Ameritech's pre-ordering systems are inadequate. When competition gets off the ground, there will be significantly more than six CLECs using the system; there will certainly be more than the eight simultaneous users that may trigger the need for "queuing" and greatly slow the processing of transactions. Ameritech does not state how it intends to deal with these eventualities.

69. In addition, there has been some indication that in Ameritech's testing, only six users accessed the pre-ordering system simultaneously (although the system allows more users to access the system). Testimony of Ameritech Witness Joseph Rogers, MI § 271 proceedings, p. 222 (ex. 13). If this is so, Ameritech's data on response times do not show very much. As the number of users expands well beyond six, response times are likely to drop significantly.

70. MCI has not yet attempted to use Ameritech's EDI pre-ordering interface. At least in part, this is because MCI has been under the impression that Ameritech's solution is not consistent with the industry's intended standard solution. Regardless, however, the fact remains that there has not been the commercial use of this interface -- or even adequate carrier to carrier testing -- needed to show that it will work as advertised. Ameritech's own testing is not an

adequate substitute -- especially given the deficiencies in those tests that I have pointed out.

Ordering

71. Ameritech's ordering interfaces are not yet ready. Let me begin by acknowledging that Ameritech has made significant progress. Ameritech finally has documentation that is in many respects acceptable, and it has reduced some of its early problems in processing orders for resale POTS. Nonetheless, fundamental systemic problems remain even with the processing of resale POTS orders, and Ameritech has barely begun tackling the difficulties in orders for more complex resale services and orders for unbundled elements. In addition, its ASR interface for some unbundled elements is entirely unacceptable.

RESALE

72. Ameritech employs an EDI interface for resale ordering. First, I should make clear that MCI fully supports Ameritech's use of EDI OSS Gateway technology for resale. EDI is the approved industry solution in this context and should be used by all ILECs. But the mere fact that Ameritech is using EDI for resale does not answer the question whether that process conforms to industry standards. While many carriers are using EDI Version 6.0, and the OBF Local Service Ordering Guideline solution requires version 7.0 to comply fully with OBF standards, Ameritech continues to use Version 5.0. There are numerous pieces of critical functionality that Ameritech's older version of this interface does not supply. Moreover, by persisting in using an outdated interface, as other ILECs implement the updated version, Ameritech burdens requesting carriers, at

least those operating on a national basis, with the need to maintain simultaneous proficiency, at both software and personnel levels, in (at least) two different EDI specifications.

73. While Ameritech commits to offering EDI version 7.0 within 120 days of approval by TCIF and agreement on implementation details with carriers, Rogers Aff. ¶ 10, this ignores the fact that EDI version 7.0 was finalized at the end of February and, at the time of Ameritech's filing, was merely awaiting the results of final balloting, a formal process required by ANSII but not by the OBF, and one which can only lead to rejection if carriers provide an explanation as to why an interface lacks technical merit. Once version 7.0 was finalized in February, there was no realistic chance that it would not be approved in balloting and, in fact, it has now been approved (subsequent to Ameritech's filing). As I explain further below, Ameritech has dragged its heels, and is continuing to drag its heels, on implementation of EDI 7.0.

74. Far more important, Ameritech's ordering processes for resale are still not operationally ready. I will first discuss why even Ameritech's ordering process for resale POTS are not yet operational -- beginning with two areas in which Ameritech has made progress but is not yet where it needs to be, and continuing to areas where Ameritech is nowhere close to where it needs to be. I will then discuss Ameritech's unacceptable use of non-standard USOC codes. I will conclude my discussion of resale by explaining why Ameritech is nowhere close to providing operational ordering processes for more complex services.

Rejection Rates

75. Ameritech claims that it has made significant progress in reducing its rejection rate for resale orders. This may well be so. Nonetheless, in MCI's experience that rate remains too high. When MCI obtained adequate information, it began submitting test orders over EDI in Illinois on April 20. Between that time and May 20, MCI submitted 400 orders. One hundred seventy six of these were rejected, and fifty seven of these rejects were unambiguously Ameritech's fault. Ex. 14. Many of the other rejects reflect the need for any CLEC to learn how to use an interface once it has received adequate documentation and training. Until such experience exists, the interface is not adequate to effectively support local competition. In addition, even considering only the fifty seven rejects that were solely Ameritech's fault, the number is still far too high.

76. In his affidavit, Mr. Roger's claims that schedule 8 of his affidavit shows that 9% of all resale orders received via EDI between January 1 and May 1 were rejected. Rogers Aff. ¶ 37. But, as far as I can understand what Mr. Rogers is referring to by Schedule 8, that is not what Schedule 8 shows. Schedule 8 shows a decline in rejects from 54% to 8.8% in Michigan between January and the beginning of May and a decline from 34.4% to 7.3% in all of the Ameritech region, but it does not give a 9% total reject figure for the entire time period. Indeed, Schedule 4 from Mr. Meixner's affidavit shows that the total rejection rate, at least through the end of March, was 17.2%.

77. In any case, the best figure claimed by Ameritech's is a 7.3% rejection rate for April. Even ignoring the fact that this rate is significantly lower than what MCI has experienced in

April and May even counting only rejects solely attributable to Ameritech, and assuming that this rate can be extrapolated to the future and to much larger volumes of orders, this rate is still too high. While Ameritech correctly argues that no system will ever be error free and analogizes its systems to a release of Microsoft Windows, Meixner Aff. ¶16, no user of Microsoft Windows would find it acceptable if 7.3% of its commands were rejected -- and this is one of the lesser problems remaining in Ameritech's interface.

78. None of this is to deny that Ameritech has had success in reducing the rejection rates for POTS resale. Indeed, Ameritech's success in reducing the rejection rate emphasizes the importance of real world experience in beginning to make the system truly functional.

Manual Intervention

79. Ameritech claims to have made progress in reducing its use of manual intervention. Nonetheless, according to Ameritech's own data, in March, 26.7% of the orders it completed for simple resold POTS service required manual intervention on its side of the ordering interface. Meixner Aff., Schedule 4. It appears that number has remained fairly constant through April. Rogers Aff. Attachment. While this was down from 47.7% in January, it remains far too high.

80. As I explained in the first part of this affidavit, even with sufficient ILEC employees, manual intervention in the ordering process is extremely problematic because it poses substantial risks of delay and error. MCI's recent experience reselling PacBell's service in California graphically bears this out. As is detailed in a complaint MCI filed with the California

Public Utilities Commission,[6] PacBell's use of a manual order processing system has caused many customers who had selected MCI as their local service provider to experience involuntary loss of dial tone or to be migrated to other carriers instead of MCI. Additionally, PacBell's use of a manual process for the transmission of FOCs has resulted in so much delay that, as of the date of MCI's complaint, FOCs remained outstanding on literally thousands of resale orders, some of which had been submitted nearly three months earlier. It is difficult to believe that Ameritech would have better success than PacBell using a similar system. That is why the Department of Justice explained in its brief on Southwestern Bell's § 271 application, "electronic `flow-through' of information . . . can dramatically improve transaction speeds and reduce errors and costs" and thus concluded that section 271 generally requires electronic flow through. DOJ SBC Brief pp. 70-71.

81. Nonetheless, Ameritech argues that in some instances establishing electronic flow through is inefficient and technically infeasible. See, e.g., Rogers Aff. ¶ 44. Ameritech also argues that in some instances manual intervention is necessary as a result of CLEC ordering errors. Rogers Aff. ¶ 47. Finally, Ameritech asserts that manual intervention does not cause many errors and may not be correlated with delay. Rogers Aff. ¶ ¶ 43, 45.

82. As for the last point, it is belied by MCI's experience with PacBell, by Ameritech's own "Electronic Service Ordering Guide" which, as quoted by the Illinois Staff, explains that mechanized interfaces decrease error, delay, and costs, Illinois Staff Brief at 18 (ex. 8), and by a study of an auditor on the staff of the Public Service Commission of Wisconsin which found a

[6] MCI Telecommunications Corp. vs. Pacific Bell and Pacific Bell Communications, Complaint, at 6-19 (filed before the Pub. Util. Comm'n of California, Dec. 11, 1996).

statistically-significant correlation between manual processing at Ameritech's end and missed installation due dates. Prefiled Direct Testimony of Ann W. Wiecki, Operation Support Systems Docket 6720-TI-120, March 19, 1997, pp. 8-9 (ex. 15). Ameritech's attempt to explain away the Wisconsin study, Rogers Aff. ¶ 45 is ludicrous: the number of complex orders processed by Ameritech, if any, has certainly not been high enough to explain away the correlation between manual processing and delay. Ameritech presents no statistical analysis, or any other analysis, to show the contrary.

83. As for Ameritech's argument that a high proportion of its manual intervention is necessitated by CLEC ordering errors, that argument does not explain the manual intervention in Ameritech's own statistics. The 26.7% manual intervention Mr. Meixner cites for March is for orders that are "processed as planned" -- e.g., orders that are not rejected for CLEC errors. Moreover, as I discuss below, orders that do contain common CLEC errors can be rejected through an automated process.

84. Finally, as for Ameritech's first point, it is undoubtedly true that there are some instances in which it will be inefficient to make the systems changes needed for orders to automatically flow through. This will generally be the case if the type order is extremely rare, or if making the systems change is extremely difficult. Neither of these circumstances can account for the vast number of orders that Ameritech continues to process manually.

85. Mr. Rogers points to six types of orders that ostensibly account for 75% of the manual reviews performed by Ameritech in April 1997, and he implies that it would be inefficient to automate processing for such orders. Rogers Aff. ¶¶49-60. Mr. Rogers is wrong. The first type of order discussed by Mr. Rogers is one in which a customer wants to switch some, but not all of

its lines to a CLEC. Rogers Aff. ¶ 50. Given the number of orders which are likely to fall into this category, this type of order should certainly be automated. Doing so is technically feasible; indeed, Mr. Rogers indicates that Ameritech is considering automating this type of order. Rogers Aff. ¶ 61. But Ameritech has not now done so and has not even committed to doing so in the future.

86. The second type of order Mr. Rogers discusses involves 1P status. Rogers Aff. ¶ 51. This is a term unique to Ameritech, but it appears to involve sub-categories of orders that are different from the bulk of orders in a particular category. Ameritech acknowledges that in some instances the sub-category of orders will itself recur "in sufficient volume to warrant a general edit to the interface to treat the matter electronically." Rogers Aff. ¶ 51. Given that 1P status accounted for a very high number of manual reviews in April (39% of manual reviews), however, I suspect that the vast majority of 1P orders are of a type that recur often enough to justify automation. Most are unlikely to be similar to the 911 example that Mr. Rogers gives in his affidavit.

87. The third type of order Mr. Rogers refers to involves orders which are received while another order for that line is already pending, for example, an order to add a feature to a line the customer ordered the day before. As Mr. Rogers elsewhere acknowledges, it is a fairly frequent occurrence that a customer will change his or her mind about features on an order shortly after submitting the original order. Rogers Aff. ¶ 77. It is MCI's understanding that Ameritech will not even allow a CLEC to send changes while an order is pending. Ameritech here implies that it will allow such changes, although it will process them manually. If this is indeed true, which Ameritech should make clear, it is good news. Nonetheless, the proper procedure is to

automatically process such orders. Such orders are processed automatically all the time in the access environment.

88. The fourth type of order referenced by Mr. Rogers, not all requested numbers are found in the CSR, Rogers. Aff. ¶53, also appears feasible efficiently to process in an automated fashion. The fifth type of order, PIC/L-PIC information missing, Rogers Aff. ¶54, appears to involve orders that are rejected after manual intervention rather than involving those which are completed. These rejects should occur automatically. Determining that a PIC is missing on a order and rejecting that order is extremely simple to do automatically. Mr. Rogers suggests that Ameritech's representatives can easily fix this type of order rather than rejecting it, Rogers Aff. ¶54; if this is indeed so, which seems unlikely since Ameritech would not know what PIC the customer desires, then it would also be feasible to fix these orders automatically. Finally, the sixth type of order, 2-PIC not supported, Rogers Aff. ¶ 55, again appears to be a type that should be rejected -- and would be extremely easy to reject automatically. In MCI's experience, however, perhaps as a result of Ameritech's manual process, many of the rejects for 2-PIC not supported are inaccurate -- orders are rejected for including 2-PICs even though the switches do indeed support 2-PICs.

89. Finally, although not a source of much manual intervention currently because Ameritech is not processing many (if any) complex orders, Ameritech indicates its intent to process many complex orders manually. Rogers Aff. ¶56-58. This will significantly increase the level of manual intervention in the future as orders for complex services increase. Of course, Ameritech is correct that some complex orders are more efficiently processed manually. But this does not include orders for common business services such as Centrex, ISDN, private lines, and

intraLATA frame relay for which industry standards already exist. Indeed, Ameritech indicates that it is considering automating orders for Centrex service and simple private lines, Rogers Aff. ¶ 61 -- but it has not done so yet and has not even committed to do so in the future.

90. The simple fact of the matter is that manual intervention remains far too high. There is nothing inherent in the nature of these transactions that makes manual intervention necessary. It is technologically and economically feasible to design and implement interfaces and downstream systems that obviate the need for the manual interventions that presently occur. What makes such manual intervention "necessary," therefore, is simply the present inadequacy of Ameritech's OSS systems for resale -- a truth confirmed by Ameritech's own recognition in many instances that it is considering eliminating the need for manual intervention. Rogers Aff. ¶ 61.

91. Ameritech has not given MCI the data needed to know which particular orders required manual intervention. As a result, MCI cannot perform its own correlation of manual intervention with error and delay. But, as Ms.Wiecki of the Wisconsin staff found, manual intervention surely is responsible for some of the errors and delays that are still seen in Ameritech's processing of resale POTS orders at relatively low volumes. Ex. 15, pp. 8-9. And, as I now discuss, and as Mr. Mickens recently admitted in testifying in Michigan, manual intervention is also surely responsible for Ameritech's failure to keep up with even the very modest number of resale POTS orders that are currently backlogged in its systems. Mickens Testimony, Michigan § 271 proceedings, pp. 212-15 (ex. 13).

The Disappearance of MCI Orders

92. As of May 27, of the 474 orders MCI had placed since it began using EDI on April 21, one hundred and three of them had disappeared in Ameritech's systems. MCI has no idea whether Ameritech has completed these orders. Ameritech may have completed the orders and failed to send MCI a completion notice, or Ameritech may simply have failed to complete the orders. For seventy eight of the orders, MCI has received a Firm Order Confirmation (FOC) stating when service was supposed to be turned up, but MCI never received either a jeopardy notification stating that the date had changed, or a completion notification. For twenty five of the orders, MCI has not received any response, including even a FOC, from Ameritech. Ameritech's ordering center more and more takes on the characteristics of a black hole.

93. Because MCI does not know whether Ameritech has in fact completed any of these orders, MCI does not know whether the customers are now its customers. It does not know whether it is responsible for maintenance and repair for these customers. In addition, since in MCI's understanding, Ameritech is unable to process changes in a customer's features while the customer's order is pending, the lengthy time in which orders are pending delays a customer's ability to change features. This is a significant problem, since, as Ameritech itself states, customers often want to change orders shortly after making them. Rogers Aff. ¶ 76. Finally, until Ameritech has completed the order and notified MCI, MCI cannot begin billing the customer. If Ameritech has actually failed to complete the orders, it prevents -- or significantly delays -- the customer from achieving the desired result of switching to MCI and it prevents MCI from receiving revenue from the customer. If, on the other hand, Ameritech has actually completed the

outstanding orders and Ameritech eventually notifies MCI of this fact, MCI will have to bill the customers all at once for all of the time they have been an MCI customer. If this amounts to several months, as certainly appears possible, the delayed and hence substantial bills will causes significant customer dissatisfaction; indeed, similar problems created severed difficulties for Sprint in the 1980s.

94. Even the statistics I gave above for the number of orders in limbo understate the problem. I only counted an order as in limbo if it had been in limbo for more than six days. This is so even though MCI's orders were for resale POTS, and 88% of these were for migrations -- a type of order that Ameritech's documentation states will be completed within 24 hours. Even the 12% of MCI's orders that were for new installs should be completed in less than six days -- most of these do not require site visits and should be completed in the same time period as migrations.

95. MCI's problem with orders in limbo appears to be similar to a problem that AT&T had in April with respect to delayed completion notifications -- although in MCI's case, MCI does not know whether the orders have ever been completed. Ameritech claimed that most of this problem with delayed completion notifications involved completion notifications that were delayed less than forty eight hours. Rogers Aff. ¶76. This is not a satisfactory explanation for MCI's difficulty, however, since all of the orders counted by MCI as "disappeared" have been in "limbo" for at least six days; many have been in limbo for substantially longer.

96. Ameritech also claims that it has significantly reduced the number of late completion notifications. Rogers Aff. ¶76. Perhaps it is not counting orders that have not actually been completed. Perhaps it is focusing on the orders of AT&T where it may have temporarily fixed the problem by giving increased scrutiny to AT&T orders. Or perhaps the number of late

completions skyrocketed after Ameritech stopped looking. In any case, the number of orders in limbo for MCI is vast and has not decreased. In fact, the problem has increased as the volume of MCI orders has increased.

97. Finally, in testimony in Michigan, Ameritech claimed that its difficulties in processing orders at the end of April resulted from a "spike" in the volume of AT&T orders when orders rose to 4,000 per day. Mr. Mickens explained that, "This type of volatility [in number of orders], if there is any degree of orders that have manual review, as I indicated this morning, will have a very, very detrimental effect upon the performance of your work force. That's essentially what happened. So when AT&T talks about some degradation in performance at the end of April and the 1st of May they're right." Mickens Testimony, Michigan § 271 proceedings, pp. 212-13 (ex. 13). But that is exactly MCI's point. There will always be spikes in orders, when competitors launch promotions or advertising campaigns -- and these spikes will far exceed 4,000 orders a day, and will occur without notice from its competitors to Ameritech. As a result, as Mr. Mickens seems to admit, so long as Ameritech maintains its high level of manual intervention, there will inevitably be periods of significantly "degrad[ed] performance" -- problems such as the disappearance of orders in Ameritech's ordering system.

98. Of course, MCI's difficulties with disappearing orders largely occurred after the supposed spike in AT&T orders at the end of April. Hence, this problem exists even without such a spike in orders. And it is a critical problem -- one that will prevent MCI from aggressive commercial launch in the Ameritech region until it is solved. Ameritech still turns up service for its own customers in a day, and MCI customers caught in Ameritech's black hole will surely blame

MCI for the confusion and delay. MCI's reputation in Michigan would not long survive such a fiasco.

Double Billing

99. Whatever might be said about Ameritech's OSS EDI interface for resale POTS ordering, Ameritech's claim that the downstream systems supported by its ordering interfaces are "operationally ready" is preposterous. MCI's testing has revealed a significant flaw in the design of Ameritech's back-end systems. As a result of that flaw, customers have received bills from both Ameritech and MCI. Ameritech has not yet shown that it has corrected this flaw.

100. As Ameritech has explained the design of its system, there are two major steps involved with a resale order; the "ordering piece" and the "drop to billing piece." The ordering piece performs all of work that needs to be done at the switch (if any). The billing piece changes the billing name of the account and makes the end-user account invisible to the retail side of Ameritech. Ameritech gives us a "complete" once the ordering piece is done, without waiting until the order has successfully navigated the change in Ameritech's billing systems. But as we discerned with our testing, orders have errored out in the "drop to billing" procedure, after MCI was notified that the job was successful and complete. MCI was never made aware of the subsequent error at the billing change stage. Why does this concern me? In this situation, at least prior to Ameritech's "fix" which I will discuss below, both companies think the customer belongs to them. The retail side of Ameritech has full visibility to the customer's account and has no idea that the customer now belongs to MCI.

101. As a result, the customer could potentially receives bills from both Ameritech and MCI for the same period of time. Indeed, in a sample of 194 orders, MCI is aware of at least 16 customers who received two bills for at least one month. Often the situation could last significantly longer than one month. MCI is aware of at least one example in which it received a completion notice on February 20 and the Ameritech billing system was not updated until May 22. Another customer, who paid Ameritech using direct debits from his checking account, was debited by Ameritech for service for two months after he was already an MCI customer. Other examples are included in ex. 16.

102. As Ameritech acknowledged in April, the ongoing potential that customers receive two bills " is a BIG PROBLEM!!" E-mail from Raymond Thomas, MCI Illinois ex. 1 on cross (emphasis in original) (ex. 26). Ameritech has stated that it will correct this problem by manually flagging orders that error out after Ameritech has sent a completion notice to MCI. Ameritech will then refrain from sending a bill to those customers. But it is highly questionable whether this manual fix will work, and it is far too early to tell whether this manual fix has worked. Although MCI has raised the double billing issue with Ameritech for months, (Letter from Dick Powell, ex.17; ex. 16, Ameritech only put this fix in place on May 12, (E-mail from Michael Murray, ex. 18), and, despite requests from MCI, Ameritech has failed to provide MCI the data it needs to better monitor whether this fix is working. (Letter from Ali Miller, ex. 19 ; E-mail from Ali Miller, ex.20). In any case, the billing cycle takes time to operate and customers take some time to realize that they have received two bills for the same time period and to report this fact. Moreover, even if employees are manually able to flag errors now when Ameritech processes 2,743 orders a month (as of March); they are unlikely to be able to do so by third quarter when Ameritech projects orders

to be 152,467 a month. Meixner Aff. Schedule 4, 13. They are also unlikely to be able to do so when system bugs cause large number of orders to error out all at once, as happened to MCI in both December and February. It is inevitable without a systemic fix that some errors will be missed and double billing will result.

103. In addition, Ameritech's "fix" does not avoid a second problem. MCI bills many of its local customers both a flat rate and a fee for daily usage. Yet, if an order errors out in Ameritech's drop to billing system after MCI has received a completion notification, Ameritech will be unable to send MCI a daily usage feed until the error has been fixed. As a result, MCI will be unable to bill the customer for usage until the error is fixed. MCI may therefore have to bill the customer on subsequent months' bills for prior month's usage -- leading to significant customer dissatisfaction when they are billed for several months of usage all at once.

104. The manual "fix" won't work. Ameritech needs to -- and has not agreed to -- fix the problem for real.

Feature Deletion and Addition

105. Other troubling errors have occurred even with orders that Ameritech deems complete. In a number of migration orders (i.e., transferring an existing Ameritech customer to MCI), certain features on such customers' accounts were unexplainedly dropped. In addition, other features were mysteriously added. This type of error is especially tricky to discover because it may not show up until a bill is generated and audited. In the meantime, MCI and the end-user customer will have been notified by Ameritech that the order was successfully processed.

106. MCI has performed some audits to determine the degree of this problem. In an audit of sixty six manual orders in Ohio, at least one feature was incorrectly added or dropped from

14 % of the orders; in Michigan the number was 6% of 67 orders. The problem has only increased with MCI's use of EDI. In MCI's audit of its EDI test of 26 orders in Illinois, at least one feature was incorrectly added or dropped in 27% of the orders. One customer was missing three features: call waiting, three way calling and repeat dialing.

107. Obviously, customers are extremely unhappy if they do not receive the features that they ordered, or if they receive, and are billed for features they did not order. Ameritech needs to correct this problem now while the volume of orders is still low. Once transactions are flowing at full volumes, such errors will be extremely difficult to track and correct.

Absence of Resale Suspend and Restore

108. Ameritech's resale ordering systems do not currently support "Resale Suspend and Restore." This means that MCI cannot suspend a customer's service for non-payment. MCI must completely disconnect the customer and then, once the customer has paid, submit an order to Ameritech for new service simply to restore the customer's service. Disconnecting the customer and submitting a new order takes much longer then "suspend and restore," requires MCI to obtain a new phone number for the customer, with all the attendant difficulties of having a new number, and forces MCI to pay the nonrecurring charges associated with new service. In addition, without suspend and restore, MCI cannot provide seasonal or vacation service to our customers.

109. Ameritech has advised MCI they will be filing a tariff for this service, however no dates or details are forthcoming. MCI first asked Ameritech how to use suspend and restore on December 2, 1996, (E-mail from Lavina Lissenburg, p. 4, ex. 3), and first posed its concern about

the fact it could not access this service to Ameritech on 1/24. It was not until 2/26 that Ameritech advised MCI of the future tariff filing to address the problem. Moreover, Ameritech has not yet provided a manual process for the non- payment issue.

Ameritech Has Not Committed to Use of Industry Standard Feature Identification Codes

110. Ameritech's ordering processes are likely to pose continuing problems for CLECs to understand and use, because Ameritech has refused to commit to industry standard Feature Identification Codes. The mere fact that Ameritech will use an EDI interface does not provide an answer to the question whether the ordering process conforms to industry standards. Ameritech has not committed to employing the industry conventions for feature identification codes. Feature identification codes identify particular services or functions. Even if the ILEC is employing a proper EDI format, a CLEC must employ the correct feature identification code for each service or function it wants to order or the transaction will "error out."

111. There are literally tens of thousands of services and functions that support feature identification codes. In the past, the codes have not been industry standards. Each ILEC, including Ameritech, could, and often did, assign idiosyncratic "USOC" codes to services. To make matters worse, Ameritech does not use a single set of USOC codes for all of its states. The Ameritech-defined USOC code for basic line-backer, for example, is "MNTXP" in Michigan, for example, but "MNTPB" in Illinois.

112. The thousands of necessary codes make it essential that a CLEC have an easy way of determining the correct codes. For these reasons, Ameritech, like all BOCs, should be expected

to implement the recently approved Telecommunications Industry Forum/ Electronic Data Interchange/ Service Order Sub-Committee (TCIF/EDI/SOSC) industry standard EDI Feature Code Listing. The TCIF/EDI/SOSC deliberately standardized codes for the most frequently ordered services first, while continuing to work on standardizing others, so that CLECs could order the most frequently used products with standard codes and have to resort to proprietary codes only for more rarely ordered products. The TCIF/EDI/SOSC continues to work on standardizing more USOCs, but this is hardly an excuse for Ameritech not to employ those important codes that have already been standardized. To date, Ameritech has not done so. Nor has it committed to doing so in the future.

113. MCI's experience with using proprietary USOCs with Ameritech is not encouraging. Ameritech, for example, has furnished MCI a USOC guide on diskettes organized only by USOC code, not by service or facility. And the service descriptions provided are often intolerably cryptic or ambiguous -- for example, two or more codes often correlate with the exact same verbal description of a service or facility. While Ameritech does have an on line service to translate features into USOC codes, this service is only for Illinois, and it is very incomplete even for Illinois. (E-mail from Ali Miller, ex. 21). Consequently, MCI has been compelled on many occasions to fax or e-mail particular USOC questions to designated Ameritech representatives. Examples are included in exhibit 3 (E-mail from Lavinna Lissenburg, p. 2) and exhibit 22 (E-mail from Ali Miller). Ameritech's processing of these questions has been poor. On one occasion, for example, Ameritech took almost a month to provide a still-incomplete answer to the question of the proper USOC codes to place specific orders for the resale of trunks; the USOC questions sent on February 10 in ex. 22 were still unanswered on February 21 (E-mail from Ali Miller, ex. 23).

Needless to say, CLECs' lack of satisfactory access to Ameritech's internal USOC codes causes significant competitive harms because it creates a substantial risk that CLECs will input incorrect or out-of-date USOC codes. Although MCI has now become relatively familiar with Ameritech's USOCs for resale POTS, Ameritech's use of USOCs will continue to create difficulties when Ameritech changes USOCs and will create difficulties for MCI in ordering services other than resale POTS. Indeed, the Wisconsin Commission rightly expressed concern with Ameritech's USOCs -- or absence of USOCs -- for unbundled elements. Transcript of Private Court Reporter, p. 11, 13 (ex. 9).

Complex Services

114. More troubling than any individual errors or implementation problems, Ameritech entirely ignores the basic lesson of our experience. That lesson is this: errors happen unexpectedly. After all, all of these problems occurred despite the "extensive internal testing" Ameritech performed prior to putting its automated resale interfaces into operation in February of last year. This experience demonstrates clearly why there must be real operations in substantial numbers before it can be determined just how well -- or how poorly -- any particular OSS interfaces and downstream systems work. Ameritech's insistence that its internal testing procedures can provide adequate assurance of acceptably error-free operation must be rejected. Further, any contention by Ameritech that its test environment mirrors the production or marketplace environment can only be described as naive. No testing can truly mimic an actual production environment because new scenarios continually emerge and human inventiveness cannot anticipate them all.

115. Ameritech does not provide any evidence of real operations for any resale services beyond simple POTS. All of the data Ameritech presents to show the success of its ordering processes -- and, for that matter, its other OSS processes, lumps together all resold services. Thus, Ameritech presents no data, including even internal testing data, showing that its ordering processes are operational with respect to complex services. If MCI's own experience is any indication, and testimony from AT&T and other CLECs in state proceedings indicate that it is, Ameritech does not yet have actual experience providing complex services through EDI.

116. Indeed, in conversations with MCI, Ameritech only claims that it is now offering to process Centrex orders through EDI if they are migrations as is. Ameritech does not claim that it can process orders for new Centrex service. Similarly, Ameritech does not claim that it can process orders for other basic business services such as ISDN, private lines, or frame relay. In fact, as I explained above, until April, Ameritech's ordering guide had only seven pages on Centrex and similar very high level descriptions of ISDN, private lines and other complex services -- certainly there was no documentation on use of EDI to order these services. As a result, in testimony in Michigan, USN stated that it had been forced to submit its orders for complex services manually. MI § 271 proceedings, May 28, 1997, p. 148 (ex. 13).

117. Even where one gets the impression from reading Ameritech's documentation that a variety of features and functions are supported by its OSS, this is often not the case. For example, Ameritech's pre-April documentation made the broad statement that its ordering systems supported hunting through EDI. This statement was misleading; in fact, Ameritech's automated ordering systems supported only one of the many flavors of hunting, i.e., serial hunting. All other types had to be ordered through a fax order. Similarly, Ameritech's pre-April documentation claimed they

supported the ordering of trunks through EDI. Nonetheless, as explained above, MCI had to ask for over two months before beginning to receive details on how this could be done through EDI. The slow response leads me to suspect that, at the time, Ameritech was not actually very far along in developing any kind of mechanized process.

118. Thus, there is every reason -- including the demonstrable failure of Ameritech's implementation -- to suspect that, when complex resale is truly up and running, Ameritech's OSS will encounter new problems for which it is not prepared and in the face of which even the best-designed systems -- which Ameritech's are not -- will default and err. The risk that such errors would impose substantial pecuniary and reputational harm upon new entrants is, in my opinion, great. Moreover, if Ameritech has already been permitted to provide long distance service by that time, regulators will have little leverage to ensure that the OSS systems are corrected.